

In the United States Patent and Trademark Office

Applicants:	F. J. Chen et al.	Docket	13,042.3
Serial No.:	Not Yet Assigned	Group:	Unknown
Confirmation No:		Examiner:	Unknown
Filed:	January 8, 2002	Date:	January 8, 2002
For:	DUAL-ZONED ABSORBENT WEBS		

Preliminary Amendment

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. § 1.111, it is respectfully requested that the Examiner preliminarily amend the specification and claims of the instant application as indicated below.

In the Specification

Please amend the specification as follows:

At page 1, line 1, insert the following as the first sentence of the application:

This application is a continuation of application serial number 09/353,278 entitled "DUAL-ZONED ABSORBENT WEBS" filed in the U.S. Patent and Trademark Office on July 14, 1999, which application is a divisional application of application serial number 08/997,287 entitled "DUAL-ZONED ABSORBENT WEBS" filed in the U.S. Patent and Trademark Office on December 23, 1997, which application is a continuation-in-part of application serial number 08/821,483 entitled "DUAL-ZONED ABSORBENT WEBS" filed in the U.S. Patent and Trademark Office on March 21, 1997. The entirety of application serial number 09/353,278 is hereby incorporated by reference.

At page 36, line 1, insert the following omitted descriptions of Figures 13 and 14:

Figure 13 is a cross-sectional view of an embodiment of this invention wherein the hydrophobic material comprises groups or tufts of hydrophobic fibers.

Figure 14 is a perspective view of an apertured nonwoven web of hydrophobic fibers useful for purposes of this invention.

At page 36, line 1, after the description of Figure 14 as amended above, please amend the next paragraph as follows:

(Amended) Figure [13] 15 is a graph of mean Rewet values and 95% confidence intervals for samples of Example 1.

At page 36, line 3, after the description of Figure 15 as amended above, please amend the next paragraph as follows:

(Amended) Figure [14] 16 is a table of physical property results for Examples 3-6.

At page 36, line 4, after the description of Figure 16 as amended above, please amend the next paragraph as follows:

(Amended) Figure [15] 17 is a table of physical property results for Examples 7-10.

At page 36, line 4, after the description of Figure 17 as amended above, insert the following descriptions of new Figures 18 and 19:

Figure 18 depicts an apertured hydrophobic web superposed over a basesheet according to the present invention.

Figure 19 depicts an apertured basesheet having protrusions about the apertures, the basesheet further comprising hydrophobic matter on the most elevated portions of the basesheet.

At page 54, line 15, insert the following two paragraphs describing new Figures 18 and 19:

FIG. 18 depicts a perspective view of a fibrous nonwoven web 60 comprising apertures 61, as in FIG. 14, except that the apertured web 60 is now shown joined to a textured basesheet 1 and the assembly is in contact with an underlying absorbent core 5. Apertures 61 in the nonwoven web 60 are substantially aligned with the depressed regions 4 of the basesheet 1. The nonwoven web 60 serves as a hydrophobic matter 2 on the most elevated portions 3 of the basesheet 1.

FIG. 19 depicts a cross-sectional view of an apertured basesheet 1 similar to that of the basesheet 1 of FIG. 5 except that the perforations 27 (apertures in the basesheet) have been formed in a manner that creates protrusions 70 extending from the lower portion of the basesheet and surrounding the apertures 70. The protrusions 70 can be wet resilient if formed in a moist state and dried.

Due to changes in pagination of the specification required by the foregoing insertions, a substitute (clean) copy of the entire specification reflecting all the foregoing amendments is enclosed.

In The Drawings

Add new Figures 18 and 19, enclosed.

In the Claims

Please cancel claims 1-8; 10-15 and 18-39 without prejudice to or disclaimer of the subject matter claimed thereby. Claims 9, 16 and 17 are retained.

Please amend claim 9 as follows:

9. (Amended) [The absorbent web of claim 1 further comprising hydrophobic matter] An absorbent web having a dry feel when wet comprising:
 - a) an inherently hydrophilic basesheet comprising papermaking fibers and having an upper surface and a lower surface, said upper surface having elevated and depressed regions further characterized by a Wet Compressed Bulk of about 5 or greater; and
 - b) hydrophobic matter deposited preferentially on the elevated regions of the upper surface of said basesheet and on a portion of the lower surface of said basesheet.

Please add the following new claims:

40. (New) The absorbent web of claims 9 or 16 wherein said web is a wet-laid tissue sheet.
41. (New) The absorbent web of claims 9 or 16 wherein said web is an airlaid structure.
42. (New) The absorbent web of claim 9 further characterized by a Wet Springback Ratio of about 0.7 or greater.
43. (New) The absorbent web of claim 9 wherein the hydrophobic matter is discontiguous.
44. (New) The absorbent web of claims 9 or 16 further characterized by a Rewet value of about 0.65 g or less and a Normalized Rewet value of about 0.6 or less.
45. (New) The absorbent web of claim 9 wherein said web has an Overall Surface Depth of about 0.2 mm or greater, an In-Plane Permeability of at least 0.5×10^{-10} m², and a Wet Compressed Bulk of about 5 cc/g or greater.
46. (New) The absorbent web of claim 9 wherein said hydrophobic matter comprises synthetic fibers fixedly attached to the upper surface of said basesheet such that about 50% or less of the surface area of the basesheet is covered with the synthetic fibers.
47. (New) The absorbent web of claim 9 further comprising hydrophobic matter on a portion of the lower surface of said basesheet.
48. (New) The absorbent web of claims 9 or 16 wherein said web has an Overall Surface Depth of about 0.2 mm or less while dry and an Overall Surface Depth of about 0.3 mm or greater when wetted to a moisture content of 100%.
49. (New) The absorbent web of claims 9 or 16 wherein said web has a wet:dry tensile ratio of at least 0.1.
50. (New) The absorbent web of claim 9 wherein said elevated regions comprise from 5 to 300 protrusions per square inch having a characteristic height of at least 0.2 mm relative to said depressed regions.

51. (New) The absorbent web of claim 9 wherein at least 30% of the upper surface of said basesheet remains substantially free of hydrophobic matter and said web has a Rewet value of 0.6 g or less.
52. (New) The absorbent web of claim 9 wherein essentially all of said hydrophobic matter resides above the 50% material line of a characteristic cross-section of said web.
53. (New) The absorbent web of claims 9 further comprising superabsorbent particles attached to said web.
54. (New) The absorbent web of claims 9 or 16 wherein said web is further characterized by a wet:dry tensile strength ratio of at least about 0.1 or greater and a Wet Springback Ratio of about 0.55 or greater.
55. (New) The absorbent web of claims 9 or 16 further characterized by a Rewet value of about 0.65 g or less and a Normalized Rewet value of about 0.6 or less, said web further comprising about 20% or greater by weight high yield pulp fibers.
56. (New) The absorbent web of claim 9 wherein said basesheet further comprises apertures and said lower surface of the basesheet further comprises wet-resilient protrusions adjacent said aperture.

A clean version of the pending claims is attached and made a part hereof.

Remarks

Claims 9, 16-17 and 40-56 are pending in this application. Claims 9, 16 and 17 were cancelled in the parent application as being drawn to a non-elected species.

Newly-added claims 40-56 substantially correspond to dependent claims as originally filed in parent application 09/353,278.

Amendments to the specification and drawings correspond to amendments made in the parent application 09/353,278.

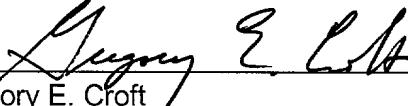
Please charge any prosecutorial fees which are due to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875.

The undersigned may be reached at: (920) 721-3616.

Respectfully submitted,

F. J. CHEN ET AL.

By:



Gregory E. Croft

Registration No.: 27,542

CERTIFICATE OF EXPRESS MAILING

I, Judy Garot, hereby certify that on January 8, 2002 this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 CFR 1.10 on the date indicated above with an "Express Mail" Mailing Label Number of ET791925841US and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

By:



Judy Garot

Clean Version Of Claims

9. (Amended) An absorbent web having a dry feel when wet comprising:

- a) an inherently hydrophilic basesheet comprising papermaking fibers and having an upper surface and a lower surface, said upper surface having elevated and depressed regions further characterized by a Wet Compressed Bulk of about 5 or greater; and
- b) hydrophobic matter deposited preferentially on the elevated regions of the upper surface of said basesheet and on a portion of the lower surface of said basesheet.

16. An absorbent dual-zoned web providing a dry feel in use, said web having an upper surface comprising a plurality of hydrophobically treated regions surrounded by inherently hydrophilic cellulosic regions, wherein upon wetting said web expands such that the hydrophobically treated regions are preferentially elevated relative to said hydrophilic regions.

17. A calendered hand towel comprising the web of claim 16.

40. (New) The absorbent web of claims 9 or 16 wherein said web is a wet-laid tissue sheet.

41. (New) The absorbent web of claims 9 or 16 wherein said web is an airlaid structure.

42. (New) The absorbent web of claim 9 further characterized by a Wet Springback Ratio of about 0.7 or greater.

43. (New) The absorbent web of claim 9 wherein the hydrophobic matter is discontiguous.

44. (New) The absorbent web of claims 9 or 16 further characterized by a Rewet value of about 0.65 g or less and a Normalized Rewet value of about 0.6 or less.

45. (New) The absorbent web of claim 9 wherein said web has an Overall Surface Depth of about 0.2 mm or greater, an In-Plane Permeability of at least 0.5×10^{-10} m², and a Wet Compressed Bulk of about 5 cc/g or greater.

46. (New) The absorbent web of claim 9 wherein said hydrophobic matter comprises synthetic fibers fixedly attached to the upper surface of said basesheet such that about 50% or less of the surface area of the basesheet is covered with the synthetic fibers.

47. (New) The absorbent web of claim 9 further comprising hydrophobic matter on a portion of the lower surface of said basesheet.

48. (New) The absorbent web of claims 9 or 16 wherein said web has an Overall Surface Depth of about 0.2 mm or less while dry and an Overall Surface Depth of about 0.3 mm or greater when wetted to a moisture content of 100%.

49. (New) The absorbent web of claims 9 or 16 wherein said web has a wet:dry tensile ratio of at least 0.1.

50. (New) The absorbent web of claim 9 wherein said elevated regions comprise from 5 to 300 protrusions per square inch having a characteristic height of at least 0.2 mm relative to said depressed regions.

51. (New) The absorbent web of claim 9 wherein at least 30% of the upper surface of said basesheet remains substantially free of hydrophobic matter and said web has a Rewet value of 0.6 g or less.

52. (New) The absorbent web of claim 9 wherein essentially all of said hydrophobic matter resides above the 50% material line of a characteristic cross-section of said web.

53. (New) The absorbent web of claims 9 further comprising superabsorbent particles attached to said web.

54. (New) The absorbent web of claims 9 or 16 wherein said web is further characterized by a wet:dry tensile strength ratio of at least about 0.1 or greater and a Wet Springback Ratio of about 0.55 or greater.

55. (New) The absorbent web of claims 9 or 16 further characterized by a Rewet value of about 0.65 g or less and a Normalized Rewet value of about 0.6 or less, said web further comprising about 20% or greater by weight high yield pulp fibers.

56. (New) The absorbent web of claim 9 wherein said basesheet further comprises apertures and said lower surface of the basesheet further comprises wet-resilient protrusions adjacent said aperture.